#### **REMARKS**

# I. Status of the Claims:

Claims 37-40 and 48-61 are pending in this application. The Applicant wishes to thank the Examiner for the telephone interview of March 22, 2006 and his suggestions for amending the claims.

By this Amendment, claim 37 has been amended. Upon entry of the Amendment, claims 37-40 and 48-61 would be pending. No new matter is believed to have been introduced by this Amendment. Entry of this Amendment before examination on the merits is respectfully requested.

## II. Written Statement of Interview:

Responsive to the Interview Summary (Paper No. 20070322), the following written statement pursuant to MPEP §713.04 is submitted concerning the substance of the telephonic interview between Examiner Thompson and the undersigned on March 22, 2007.

In the teleconference, the Examiners and the undersigned discussed various possible amendments to the claims, including the aspects of the memory, linearity between the output channels, etc. See e.g., Interview Summary, p.2.

## III. Rejections under 35 U.S.C. § 103:

Claims 37-40, 48-55, 57-58 and 60 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Arimoto et al. (US 5,371,613), Orito (US 6,072,912), Sawada (US 5,912,992) and Irie (US 5,644,409). Claims 59 and 61 are rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Arimoto et al., Orito, Sawada, Irie and Usami (US 5,960,110).

Claim 37, as amended, is directed to an image sensing apparatus having an image sensor, a memory, a reference level acquisition unit, an adjustment setting unit, and a plurality of adjustment unit.

Specifically, as claimed, the image sensor separately reads out image signals from a plurality of photoreceptive pixels via a plurality of output channels. The memory temporarily stores the image signals output from the output channels. The reference level acquisition unit is adapted to acquire a first reference level based on the image signals read from the memory when the image sensor reads a white member, and to acquire a second reference level based on the image signals read from the memory when the image sensor reads a reference density member having a predetermined density of half tone. The first reference level is a maximum of signal levels read out via the plurality of output channels when the white member is scanned, and the second reference level is a minimum of signal levels read out via the plurality of output channels when the reference density member is scanned.

Further, the adjustment setting unit sets adjustment data for each channel based on the acquired first and second reference levels. Finally, the plurality of adjustment units, respectively corresponding to the plurality of output channels, are each adapted to adjust levels of the image signals output from the output channels according to the set adjustment data for each channel so as to substantially correspond with the first reference level when the image sensor reads the white member, adjust levels of the image output from the output channels according to the set adjustment data for each channel so as to substantially correspond with the second reference level when the image sensor reads the reference density member, and adjust levels of the image signals output from the output channels according to the set adjustment data for each channel so as to substantially correspond with a level obtained by interpolating between

the first and second reference levels when the image sensor reads an image having a density other than the density of the white member and the reference density member. The plurality of adjustment units operate to match the linearity of the plurality of channels to a common linearity.

Per the Examiner's suggestion, claim 37 has been amended to further incorporate the aspects of a memory for temporarily storing the image signals output from the output channels of an image sensor, setting of adjustment data (e.g., such as maintained in look up tables in the exemplary embodiments) based on the acquired first and second reference levels, and adjusting image output from the output channels according to the set adjustment data (for each channel) to match the linearity of the plurality of channels to a common linearity.

It is respectfully submitted that the cited references, individually or in combination, do not disclose or suggest the combination of claim 1, as amended. Further, it is respectfully submitted that the cited references, individually or in combination, do not disclose or address the claimed combination in the context of matching the linearity of the plurality of output channels of an image sensor to a common linearity. For example, none of the cited references relate to an image sensor with a plurality of output channels or disclose or suggest linearity issues when an image sensor with a plurality of output channels is employed.

According, claim 37 and its dependent claims are believed to be distinguishable over the cited references. Reconsideration and allowance of the claims are respectfully requested.

#### **CONCLUSION**

Based on the foregoing amendments and remarks, the Applicant respectfully requests reconsideration and withdrawal of the rejection of claims and allowance of this application.

## **AUTHORIZATION**

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. <u>13-4500</u>, Order No. <u>1232-4676</u>.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. <u>13-4500</u>, Order No. <u>1232-4676</u>.

Respectfully submitted, MORGAN & FINNEGAN, L.L.P.

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By: James Hwa

Registration No. <u>42,680</u>

(202) 857-7887 Telephone (202) 857-7929 Facsimile

<u>Correspondence Address</u>:

MORGAN & FINNEGAN, L.L.P. 3 World Financial Center New York, NY 10281-2101